polyether functional monomer having the general structure:

$$R^2$$
-[CH<sub>2</sub>-(CH<sub>2</sub>)<sub>m</sub>-O]<sub>j</sub>-A<sub>1</sub>-[O-(CH<sub>2</sub>)<sub>n</sub>-CH<sub>2</sub>]<sub>k</sub>- $R^2$ 

where m and n are each independently 1 or 2; where j and k are each independently between 1 and 20;  $R^2$  is vinyl, allyl, methacrylyl, acrylyl, methacrylate, or acrylate; and  $A^1$  is a dihydroxy aromatic-containing material;

a photoinitiator configured to initiate polymerization of the monomer composition in response to being exposed to activating light during use; and

directing activating light toward at least one of the mold members to cure the lens forming composition to form the eyeglass lens.

# Response to Office Action Mailed July 17, 2000

# RECEIVED

### A. Pending Claims

Claims 194-214 have been rejected. Claim 194 has been amended. Claims 194-214 are pending in the case.

# B. The Claims Are Not Anticipated By The Cited Art Pursuant To 35 U.S.C. § 102(b)

The Examiner rejected claims 194-201 and 203-214 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,529,728 to Buazza et al. (hereinafter "Buazza -728"). Applicant



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respectfully disagrees.

The standard for "anticipation" is one of fairly strict identity. A claim can only be anticipated if each and every element set forth in the claims is found to be either expressly or inherently described in the cited art. *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 728, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), MPEP § 2131.

Amended claim 194 recites, in part "a monomer composition comprising an aromatic containing polyethylenic polyether functional monomer having the general structure:"

"a monomer composition comprising an aromatic containing polyethylenic polyether functional monomer <u>having the general structure</u>:

$$\mathbb{R}^2$$
-[CH<sub>2</sub>-(CH<sub>2</sub>)<sub>m</sub>-O]<sub>i</sub>-A<sub>1</sub>-[O-(CH<sub>2</sub>)<sub>n</sub>-CH<sub>2</sub>]<sub>k</sub>-R<sup>2</sup>

where m and n are each independently 1 or 2;
where j and k are each independently between 1 and 20;

R<sup>2</sup> is vinyl, allyl, methacrylyl, acrylyl, methacrylate, or acrylate; and
A<sup>1</sup> is a dihydroxy aromatic-containing material;"

Support for this amendment can be found in Applicant's specification, which states:

"The monomer composition preferably includes an aromatic containing polyethylenic polyether functional monomer. In an embodiment, the polyether employed is an ethylene oxide derived polyether, propylene oxide derived polyether, or mixtures thereof. Preferably, the polyether is an ethylene oxide derived polyether. The aromatic polyether polyethylenic functional monomer preferably has the general structure (V), depicted below where each  $R_2$  is a polymerizable unsaturated group, m and n are independently 1 or 2, and the average values of j and k are each independently in the range of from about 1 to about 20. Common polymerizable unsaturated groups include vinyl, allyl, allyl carbonate, methacrylyl, acrylyl, methacrylate, and acrylate.



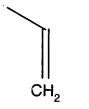
$$R_2$$
-[CH<sub>2</sub>-(CH<sub>2</sub>)<sub>m</sub>-O]<sub>j</sub>-A<sub>1</sub>-[O-(CH<sub>2</sub>)<sub>n</sub>-CH<sub>2</sub>]<sub>k</sub>-R<sub>2</sub>

A<sub>1</sub> is the divalent radical derived from a dihydroxy aromatic-containing material."

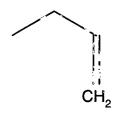
(Specification, page 89, lines 6-18).

The vinyl, allyl, methacrylyl, acrylyl, methacrylate, and acrylate groups are represented by the structures below:

Vinyl is -CH=CH<sub>2</sub>



Allyl is -CH<sub>2</sub>-CH=CH<sub>2</sub>



Acrylyl is -C(O)-CH=CH<sub>2</sub>

Methacrylyl is -C(O)-C(CH<sub>3</sub>)=CH<sub>2</sub>



 $R = CH_3$  or H

Acrylate is -O-C(O)-CH=CH<sub>2</sub>

Methacrylate is -O-C(O)-C(CH<sub>3</sub>)=CH<sub>2</sub>

$$O$$
 $CH_2$ 
 $R$ 

 $R = CH_3$  or H

Buazza -728, however, describes a monomer composition chemically distinct from the aromatic containing polyethylenic polyether functional monomer. Buazza states that, "According to the present invention a polymerizable lens forming composition comprises an aromatic-containing bis-(allyl carbonate)-functional monomer and at least one polyethylenic-functional monomer containing two ethylenically unsaturated groups selected from acrylyl and methacrylyl." (Buazza -728, column 11, lines 38-42). Buazza -728 further states:



The aromatic-containing bis(allyl carbonate)-functional monomers can be represented by the formula:

A<sub>1</sub> is the divalent radical derived from a dihydroxy aromatic-containing material (Buzzza-728, column 11, lines 59-65).

The predominant polymerizable groups of Buazza are allyl carbonates. Allyl carbonates are represented by:

-O-C(O)-O-CH<sub>2</sub>-CH=CH<sub>2</sub>

Applicant submits that Buzza-728 does not teach or suggest the use of aromatic polyethylenic polyether functional monomers as described in amended claim 194.

In addition, many of the dependent claims are separately patentable. For example, claim 201 recites, in part "the second mold member comprises a casting face and a non-casting face, and further comprising placing a material capable of being tinted upon the casting face prior to



placing the liquid lens forming composition in the mold cavity, and further comprising applying dye to the material to tint the lens forming composition." The features of this claim, in combination with the features of independent claim 194, do not appear to be taught or suggested by the cited art.

Claim 2.11 recites, in part "an amount of activating light is directed towards the mold cavity, and wherein the mold cavity comprises a temperature, and wherein the amount of activating light directed to the mold cavity is a function of the temperature of at least a portion of the mold cavity." The features of this claim, in combination with the features of independent claim 194, do not appear to be taught or suggested by the cited art.

## C. The Claims Are Not Obvious Over The Cited Art Pursuant To 35 U.S.C. § 103(a)

The Examiner rejected claim 202 under 35 U.S.C. § 103(a) as being unpatentable over Buazza -728. Applicant respectfully disagrees.

For at least the same reasons cited above, the features of claim 202, in combination with the features of independent claim 194, do not appear to be obvious in view of the cited art.

